

## 4.0 IMPACT EVALUATION

### 4.1 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

This section summarizes the general unavoidable impacts associated with the construction and operation of the Proposed Action, i.e. the transportation infrastructure improvements at Rentschler Field. These impacts are discussed in greater detail in Section 3.0 of this document; however a summary of the unavoidable adverse impacts is provided below.

#### 4.1.1 Construction Phase

Air Quality. Temporary impacts to air quality from vehicular emissions, construction equipment, and dust would likely result from construction related activities.

Noise. During construction of the proposed transportation improvements, there would be short-term increases in noise levels in and around the construction site.

Traffic, Parking, and Circulation. During construction, there would be a temporary increase in truck traffic near the site and at streets and intersections surrounding the site.

Solid Wastes and Recycling. Construction activities would result in the temporary generation of additional solid waste due to site preparation (including the removal of soil), utility relocation, and construction material packaging and waste.

Stormwater. Excavation of the site for construction and utility relocation would increase the potential for erosion and sediment transport during wet weather periods while bare earth is exposed on the site.

Energy. Construction-related energy usage would produce a one-time energy demand including the energy utilized in the production and installation of construction materials.

Rare Species. Construction of East Hartford Boulevard North, the internal loop road and site development will negatively affect grassland bird habitat that supports several state-listed species. The degree of impact will depend on the size of the area to be disturbed and the time at which the construction takes place. Construction during the summer nesting season would have the most impact to grassland birds.

Properties. The construction of the proposed transportation improvements on Silver Lane, at the Roberts Street/Silver Lane intersection and in the Rt. 2/Brewer/Main/High Streets area will impact properties on a temporary and permanent basis. Partial property takings will be required for several properties and at least two full property takings would be required.

#### **4.1.2 Operational Phase**

Traffic, Parking, and Circulation. The proposed transportation improvements would assist in stimulating site development that would result in an increase in the number of vehicle trips on roadways in the project vicinity.

Light. The transportation improvements would result in increased light in the Roberts Street, Silver Lane and Main/High Street areas. Site development would increase skyglow in the south East Hartford area.

Energy. Operation and maintenance of the proposed transportation improvements would consume energy in the form of electricity and natural gas.

Visual Resources. The proposed transportation improvements, particularly the grade-separated intersection at Roberts Street/Silver Lane would alter the aesthetics of this area of East Hartford. The new elevated Roberts Street would be visible from homes along Silver Lane approximately 1,000 feet in each direction from the intersection.

Rare Species. The site development would result in a complete loss of viable grassland bird habitat that supports several state-listed species, most notably the State Endangered grasshopper sparrow and upland sandpiper.

#### **4.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

The following is a summary of the non-recoverable resources associated with the Proposed Action and the associated development of Rentschler Field. For detailed information, see the appropriate subsections of Section 3.0 in this EIE.

Utilities and Services. The proposed site development will result in additional water consumption of approximately 1.2 million gallons per day to be serviced by MDC. The site development will also generate an additional demand (0.8 million gallons per day) on the East Hartford wastewater treatment facility and its distribution system.

Energy. Construction and operation/maintenance of the proposed transportation infrastructure and site development would require the consumption of non-renewable energy resources (e.g., gasoline, diesel fuel, electricity).

Economic Resources. The estimated construction cost for the proposed transportation improvements is \$78 million. The construction and operation/maintenance of the transportation improvements would be borne by Connecticut tax payers in the form of state-bonded monies approved by the legislature. The site development would be privately funded.

### 4.3 SUMMARY OF MITIGATION MEASURES

The following is a summary of the mitigation measures that would be employed for the Proposed Action and the associated development of Rentschler Field. Greater detail is provided in the pertinent parts of Section 3.0.

#### 4.3.1 Construction Phase

Rare Species. Impacts to state-listed grassland birds, most notably the grasshopper sparrow and upland sandpiper, have been mitigated during construction and during Phase 1 site development operations by restoring the grassland habitat that has undergone ecological succession in the form of increased shrub growth. This was achieved by cutting and removing shrubs within a large portion of the airfield that was formerly prime grassland habitat. This temporary grassland preservation area is physically separated from the Phase 1 construction area by a chain link fence.

Traffic, Parking and Circulation. A Maintenance and Protection of Traffic Plan will be prepared during the design phase of the project for all proposed transportation improvement areas. The Plan will serve to allow for vehicular movements (including emergency vehicles) to access all state and local streets and facilities.

Air Quality. Temporary, impacts to air quality will be mitigated through the use of BMPs such as minimization of exposed erodible earth area, stabilization of exposed earth, work areas, haul roads and stockpiled material, use of covered haul trucks, and minimizing the transport of soil by construction equipment from unpaved to paved surfaces. Increased emissions from construction related traffic will be mitigated through implementation of appropriate traffic controls, such as limiting idle time of heavy equipment to 3 minutes, as required by Section 22a-174-18(b)(3)(C) of the RCSA, and using construction equipment with air pollution control devices.

Noise. Noise impacts to the surrounding area will be minimized by limiting construction activities to weekday, daytime work hours. The noise mitigation measures used during construction would be subject to the continuing approval of the site engineer.

Water Quality. Erosion and sedimentation control will be applied through the use of erosion and sediment control measures, and BMPs, to prevent polluted stormwater from running off and entering surface waters. If the project involves disturbance of one or more acres of land, a SWPCP will be developed and maintained on-site at all times to ensure that construction will satisfy conditions under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities, administered by the DEP.

Cultural Resources. Areas of potential archaeological sensitivity will undergo Phase 1B investigation to determine if significant intact artifacts exist. A positive finding will result in the recovery of artifacts and appropriate documentation in accordance with SHPO guidelines.

#### **4.3.2 Operation Phase**

Traffic Parking and Circulation. The Proposed Action, in and of itself, is a mitigation measure for the expected traffic to be generated from the Rentschler Field development. The transportation improvements have been designed to accommodate the expected future traffic from the site with sufficient flexibility for the management of Stadium traffic during events.

Rare Species. Impacts to state-listed grassland birds, most notably the grasshopper sparrow and upland sandpiper, will be mitigated by the purchase, management and preservation of suitable off-site properties within the Connecticut River Valley area.

Impacts to the eastern box turtle, a State Species of Special Concern, will be mitigated by preserving an approximately 130-acre portion of the eastern woodland area of UTC property. The developer, TMG, is currently coordinating with DEP and ACOE regarding the details of the preservation plan.

Wetlands. Impacts to wetlands at the I-84 Westbound off ramp at Roberts Street will be mitigated by creation of a replacement wetland to the immediate west of the impact area. Impacts to a narrow fringe of wetlands associated with Willow Brook as a result of East Hartford Boulevard North would be mitigated by preservation of existing expansive wetlands in the eastern portion of the UTC property. Opportunities for enhancement of some wetlands in the northeast corner of the UTC property that are dominated by invasive species also exist.

#### Flood Zones

Impacts to regulatory flood zones (floodways, 100-year floodplains) at the proposed East Hartford Boulevard North crossing of Willow Brook and the I-84 Westbound off ramp at Roberts Street realignment will be mitigated by the following:

- Detailed hydrologic/hydraulic analysis to determine the exact flood zone limits;
- Compensatory mitigation to offset impacts to instantaneous flows and/or flood zone elevations.

#### Noise

The proposed Roberts Street/Silver Lane/East Hartford Boulevard North improvements would cause an exceedance of the FHWA/DOT noise criterion for residential properties at 326 Main Street, a residence located to the immediate north of the proposed East Hartford Boulevard South intersection with Main Street. Mitigation for this impact can be achieved by: shifting the entrance approximately 20 feet further south; new acoustical windows and insulation; or, acquisition of the property. The installation of a noise barrier may offer some attenuation to residents of this property as well. This issue will be evaluated in greater detail during the design phase of the project.

#### Light

The proposed site development would increase illumination on Rentschler Field and, potentially, to surrounding neighborhoods. This potential effect will be minimized by downward-directed and shielded lights that minimize light trespass and skyglow.

#### Utilities

The proposed site development will place a demand on existing utilities. The developer will be required to coordinate with the appropriate utility (MDC, CL&P, SBC, etc.) to ensure adequate

connection and capacity of existing utility infrastructure. Improvement to the utility infrastructure would be the financial responsibility of the developer.

#### Aesthetics/Viewsheds

The proposed transportation improvements at the Roberts Street/Silver Lane/East Hartford Boulevard North intersection would affect a change in viewsheds for the Silver Lane area. The elevated portion of Roberts Street over Silver Lane would be visible from Silver Lane approximately 1,000 feet to the east and west. During the design phase of the project, efforts will be made to minimize this aesthetic impact through the use of materials and lighting that are compatible with the character of the neighborhood.

#### Properties

The proposed transportation improvements: on Silver Lane; at the Roberts Street/Silver Lane intersection; at the I-84 westbound off ramp; at the Main Street/Willow Street intersection; and, in the Rt. 2/Brewer/Main/High Streets area will require property acquisitions. Minor partial acquisitions (i.e. encroachments that would not affect the functionality or utilization of the property) would be required for approximately 73 properties. Full property acquisition would be required for at least two properties. There are approximately 8 properties that would be encroached upon by the proposed roadways whose functionality could be significantly impacted. Further design analysis is needed to determine if these potential impacts can be minimized. Any partial or full property acquisitions will be mitigated by providing fair-market value compensation to the affected property owners as outlined under state laws and regulations. Full property takings will need to comply with the State Uniform Relocation Assistance Act (CSGS Chapter 135) and Town of East Hartford relocation procedures.

### **4.4 CERTIFICATES, PERMITS, APPROVALS**

The project team developed an approach to identify those permits, licenses and approvals required or anticipated for this project, which begins with identifying all potential interested agencies (federal, state and local). Feedback from these agencies was compiled to identify the potential permit requirements.

At this time, the project components of the Proposed Action are at a conceptual stage. Consequently, most potential permits have been identified. However, the list included herein may be further refined (by eliminating or adding items) as the design process proceeds.

The list of permits that will be required by the project, or may be necessary depending on certain factors as the project design continues to be developed and is provided in Table 4.4-1. Accompanying the permit table is a list of notes (assumptions, abbreviations key) that detail some of the more important factors used to refine the permit lists. The applicability of these permits to various elements of the project (i.e. transportation improvements, site development) is also included in the table.

**Table 4.4-1. Approvals Required for State-Sponsored Infrastructure Improvements and Associated Site Development Activities.**

Potential Applicability *	Agency -Permit, Certificate, Approval	Issues, Comments
8, 10	Town of East Hartford - Building Permit/Certificate of Occupancy	Required for structures built as part of Rentschler Field Development.
8, 10	Town of East Hartford – Planning and Zoning Site Plan Approval	Required for new building and parking construction by private entities.
1, 2, 6, 9, 10	Town of East Hartford – Planning and Zoning Flood Hazard Permit	Required for work within flood zones.
1,2,6,7,8,10	Town of East Hartford - Inland Wetlands and Watercourses Permit	Required for work within 100 ft. of wetlands or 200 ft. from watercourse.
All	DEP Water - General Permit for Discharge of Stormwater and Dewatering Wastewater Associated with Construction Activities	Registration and plan required prior to initiating activities. Required for land disturbance greater than 1 acre.
All	State Traffic Commission Certificate	Required for construction work directly affecting state roads. STC certificate updated as new site development projects are proposed.
1,8,9	DEP - Approval for taking of state endangered species and/or their habitat	Required for compliance with CT Endangered Species Act.
1-5	DEP and MDC - Approval of Utility Relocation Plan	Review by DEP and MDC required for movement of existing and placing of new utilities.
All	CNG, CL&P, other utilities	Service connections will require coordination with and approval from utility companies.
All	DEP Water - General Permit for Hydrostatic Testing Wastewater	Required if pressure testing of pipelines is required.
1-2	DEP Water - Flood Management Certification, Section 25-68 CGS	Required for work within floodplain/floodway. Need to demonstrate zero increase in flood elevation as a result of project.
1-2	FEMA - Letter of Map Revision (LOMR) or Conditional LOMR	Require if proponent wishes to refute existing floodplain boundaries.

Potential Applicability Key:

- 1 = Roberts Street/Silver Lane/EH BLVD North
- 2 = I-84 Westbound Off Ramp/Roberts Street/Brookside Lane
- 3 = Rt. 2/Brewer/Main/High Street area improvements
- 4 = Main Street/Willow Street intersection improvements
- 5 = Silver Lane mainline improvements
- 6 = Stadium Parking
- 7 = EHGEMS Access Road
- 8 = EHGEMS Building/Site Construction
- 9 = Rentschler Field Development Internal Road System
- 10 = Rentschler Field Site Development Projects

**Table 4.4-1 continued. Approvals Required for State-Sponsored Infrastructure Improvements and Associated Site Development Activities.**

Potential Applicability *	Agency -Permit, Certificate, Approval	Issues, Comments
10	DEP Water - General Permit for Discharge of Stormwater and Dewatering Wastewater Associated with Commercial Activities	Registration and stormwater management plan required on or before the beginning of operations.
10	DEP Water - General Permit for Discharge of Stormwater and Dewatering Wastewater Associated with Industrial Activities	Applies to all discharges from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or material storage areas at an industrial activity.
1,2,6,9,10	Army Corps of Engineers - Section 404 Permit	Projects affecting less than 5,000 sf of federal jurisdictional wetlands are generally exempt from filing under the PGP program for Category I activities.
1,2,6,9,10	DEP Water - Section 401 Water Quality Certificate	Generally required if greater than 5,000 sf of direct federal wetland impact.
1,2	DEP - Inland Wetlands Permit	Only required for state sponsored projects that directly affect state jurisdictional wetlands
10	EPA - Hazardous Waste Generation Registration	Required only if hazardous waste is expected to be generated during operations. Most likely only applicable to R&D and manufacturing uses at Rentschler Field.
10	DEP - General Permit for the Discharge of Minor Photographic Processing Wastewater	Required for discharge of wastewater from photographic booths and x-ray processing most likely associated with R&D and medical facilities.
1,2	FHWA - Access Modification Approval	May be required for work extending onto I-84 or traffic affecting I-84.
1,2	DEP Bureau of Air Management - Indirect Source Permit	Required for new lanes greater than 1 mile with signalized intersection and/or expressway interchanges, a new interchange service or new highway location.

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Potential Applicability *	Agency -Permit, Certificate, Approval	Issues, Comments
All	DEP - General Permit to Construct and/or Operate a New or Existing Emergency Engine	Required for use of emergency generators for buildings construction/operation and transportation construction.
2,3,4,5,6,9,10	DEP Hazardous Waste - Transfer Act Filings/Approvals	Required for acquisition of "establishments" as stipulated in the CT Transfer Act.
1	DEP - RCRA Closure Plan Approval	Required for closure of RCRA <90 day hazardous waste storage facilities.
10	DEP - Limit Potential to Emit from Major Stationary Sources of Air Pollution	Required for stationary air emissions of regulated air pollutant(s) equal to or greater than the Title V thresholds, defined in Section 22a-174-33 of the Regulations of Connecticut State Agencies (RCSA), but having actual emissions below such thresholds.
10	Diversion of Water for Consumptive Use (DEP-IWRD-GP-001):	Applies to minor diversions of water for consumptive uses, including: water supply system interconnections; diversions of up to 250,000 gallons of water per day; unregistered water supply systems from which withdrawal was maintained on or before July 1, 1982; backup wells; hydrostatic testing of pipes and tanks; restoration of lost capacity; drinking water wells "under the influence" of surface waters; diversion for ground water remediation; and small water supply systems.
10	Lake, Pond and Basin Dredging (DEP-IWRD-GP-004):	This general permit authorizes the following activities, subject to certain conditions, if they are within the jurisdiction of the Commissioner: dredging of lakes and ponds to restore or improve aquatic habitat or maintain the existing recreational use; and dredging of sedimentation, detention or retention basins to restore design capacity. A request for authorization is required to be submitted <i>and</i> approved in writing by the Department in order for an activity to be authorized by this general permit.

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